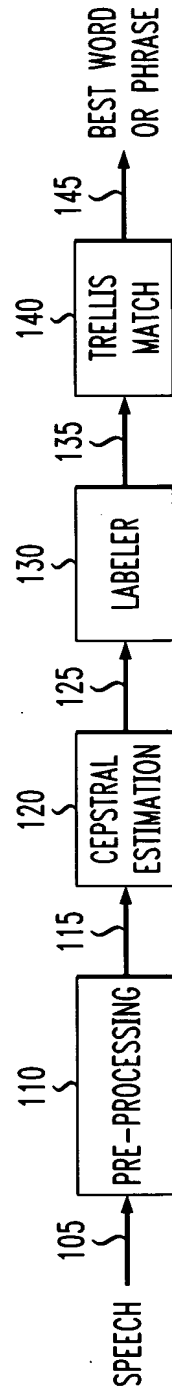
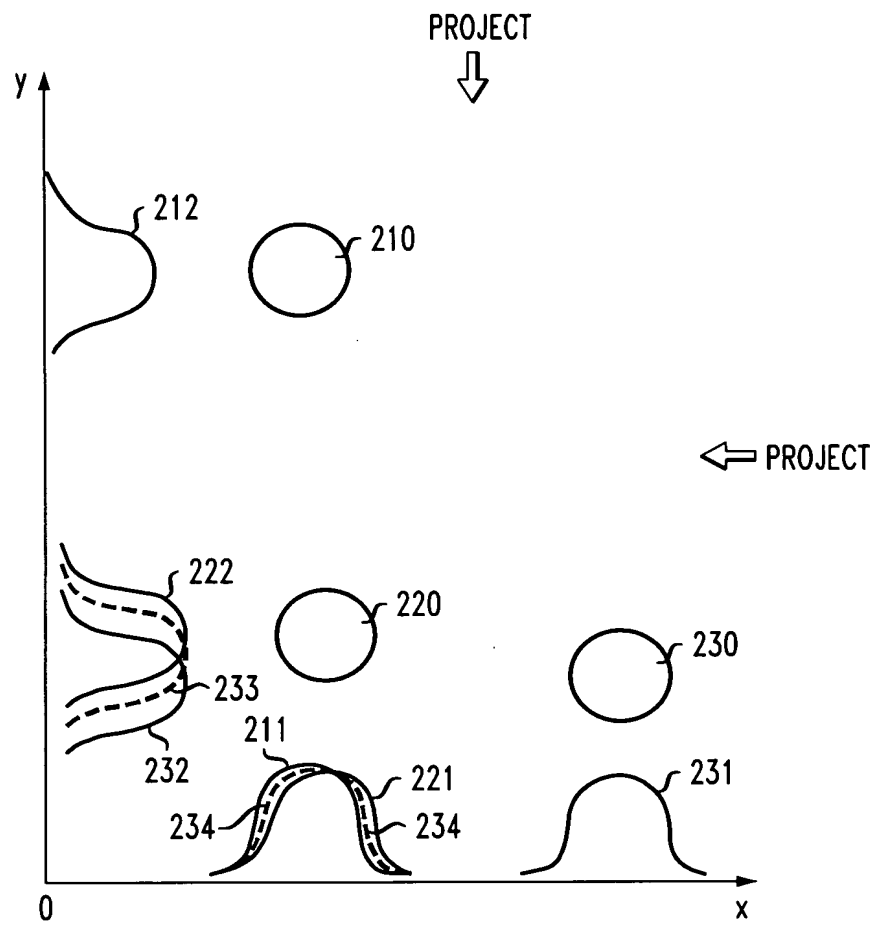


FIG. 1



*FIG. 2*



*FIG. 3*

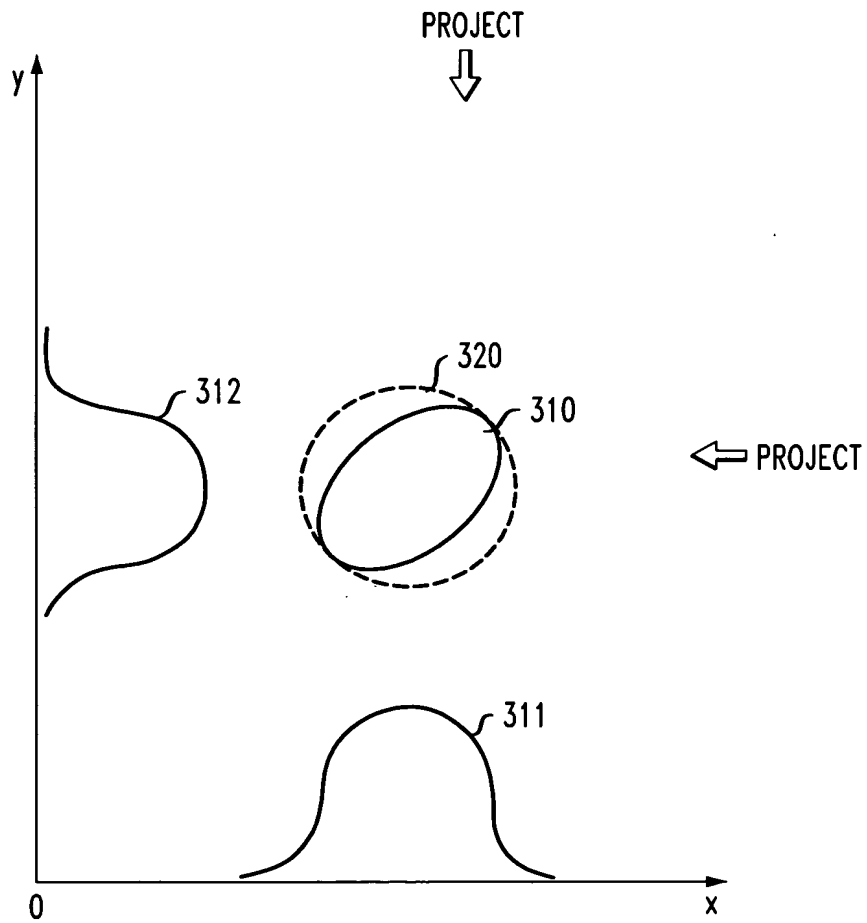
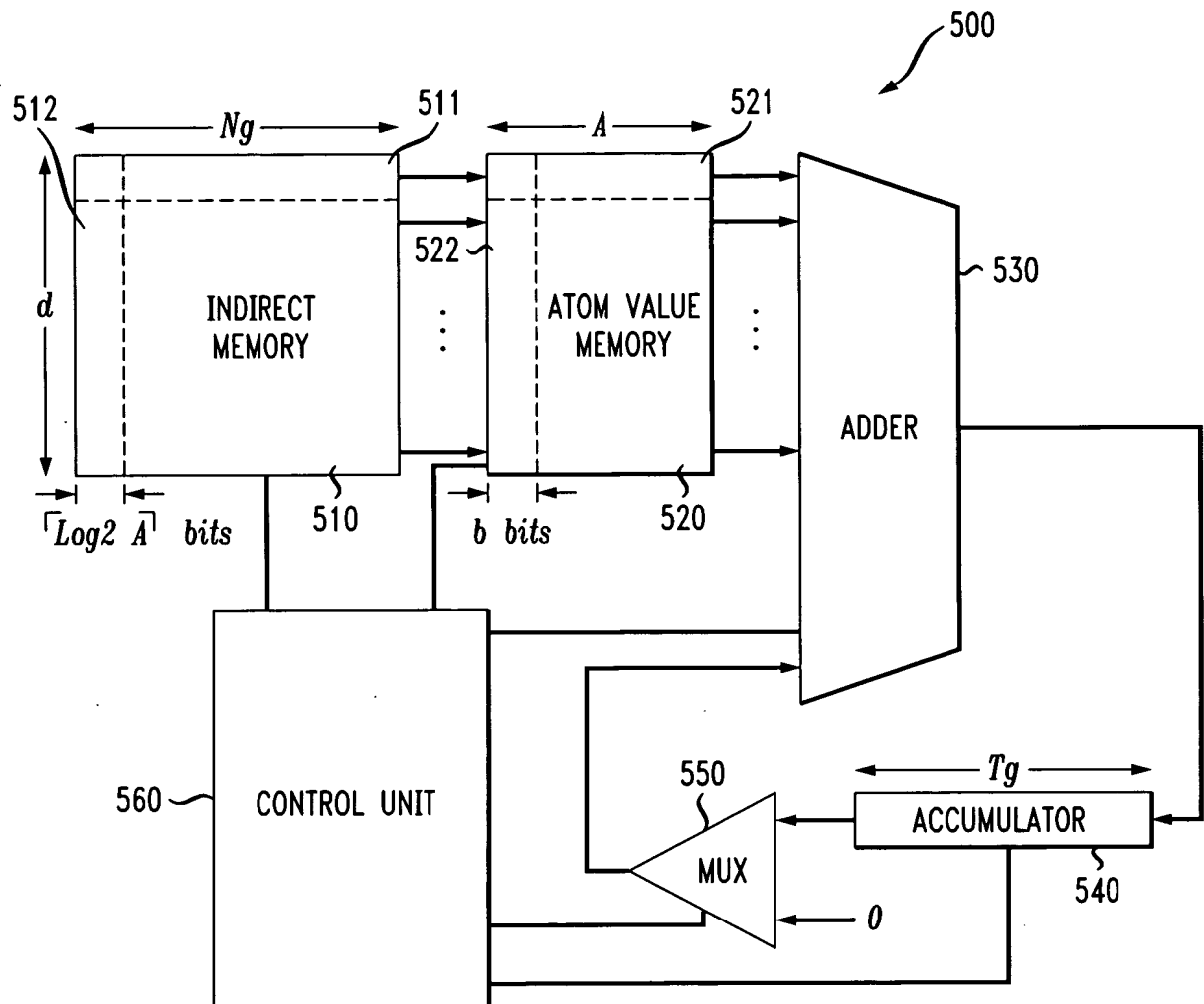


FIG. 4

400									
410									
g1	g2	g3	g4	g5	g6	g7	g8	420	
1	1	0	0	1	1	1	0	a0(v)	a1(v)
0	1	1	0	1	1	1	1	-0.01	2.11
1	1	0	1	0	1	1	1	5.12	-1.02
0	1	1	0	1	0	1	0	3.70	1.44
0	0	1	1	0	0	1	0	-1.20	0.37
1	1	1	0	1	1	1	0	2.28	1.00
0	1	1	1	1	1	1	1	-1.36	0.87
1	0	0	1	1	1	0	1	-0.78	1.73
0	1	0	1	1	1	0	0	3.25	2.61
0	0	0	1	1	0	0	0	-0.94	6.20
0	0	0	1	1	1	0	0	3.40	-7.31
14.91	20.63	12.35	8.22	11.54	0.57	12.21	6.93	430	

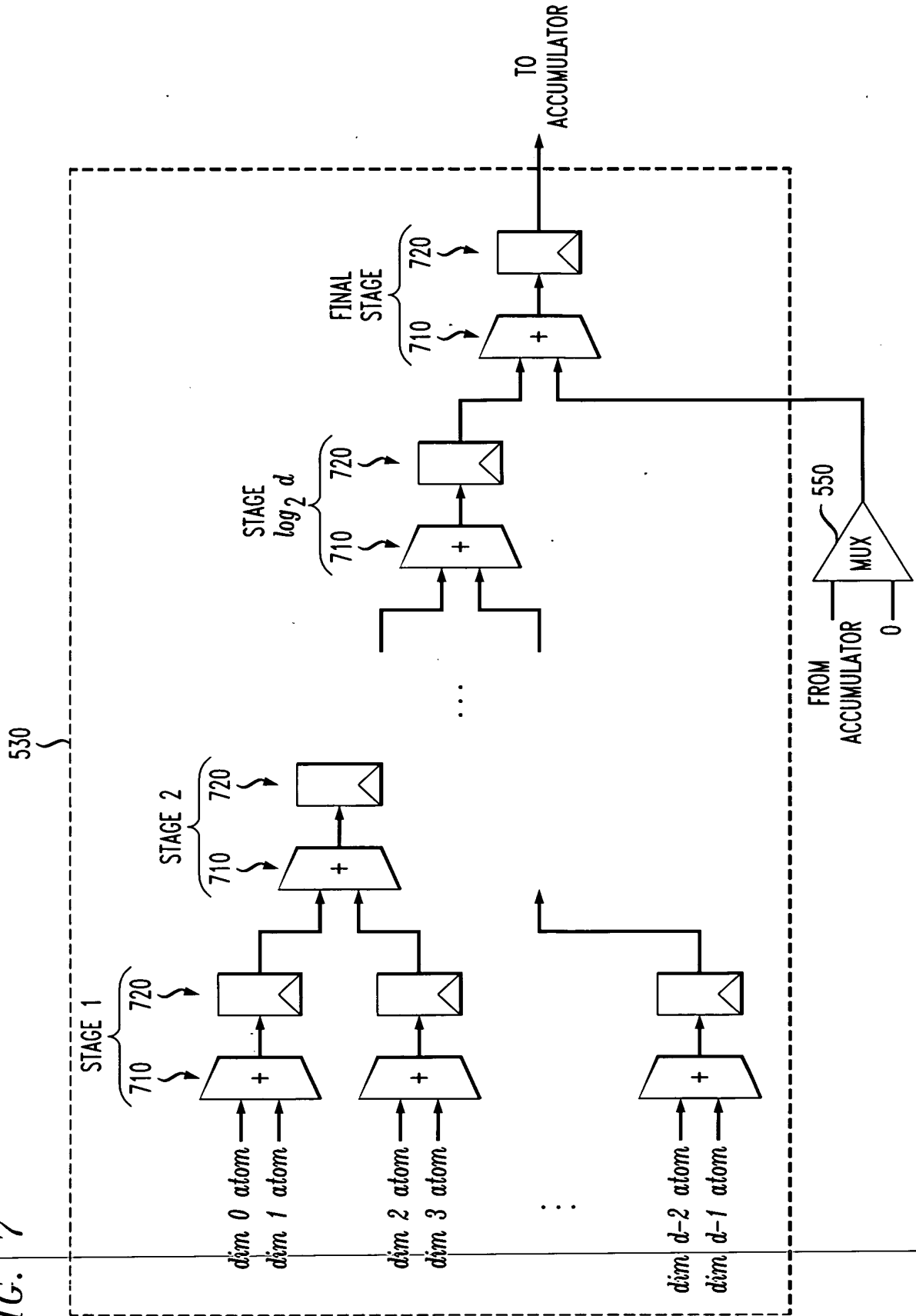
FIG. 5



*FIG. 6*

EXPRESSION	MEANING	TYPICAL
$A$	ATOMS PER DIMENSION	64
$b$	BITS TO REPRESENT AN ATOM VALUE	32
$d$	DIMENSIONS IN THE MODEL	40
$r = \lceil \log_2 A \rceil$	BITS TO RECORD AN ATOM INDEX	6
$N_g$	GAUSSIANS PROCESSED PER INDIRECT MEMORY LOAD	32
$T_g$	TOTAL GAUSSIANS ACCUMULATED	640

FIG. 7



*FIG. 8*  
800

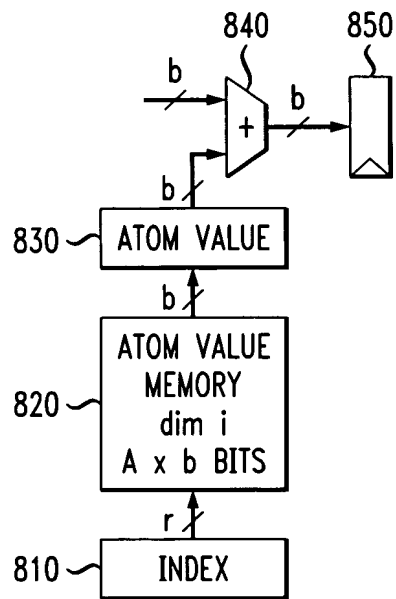




FIG. 9

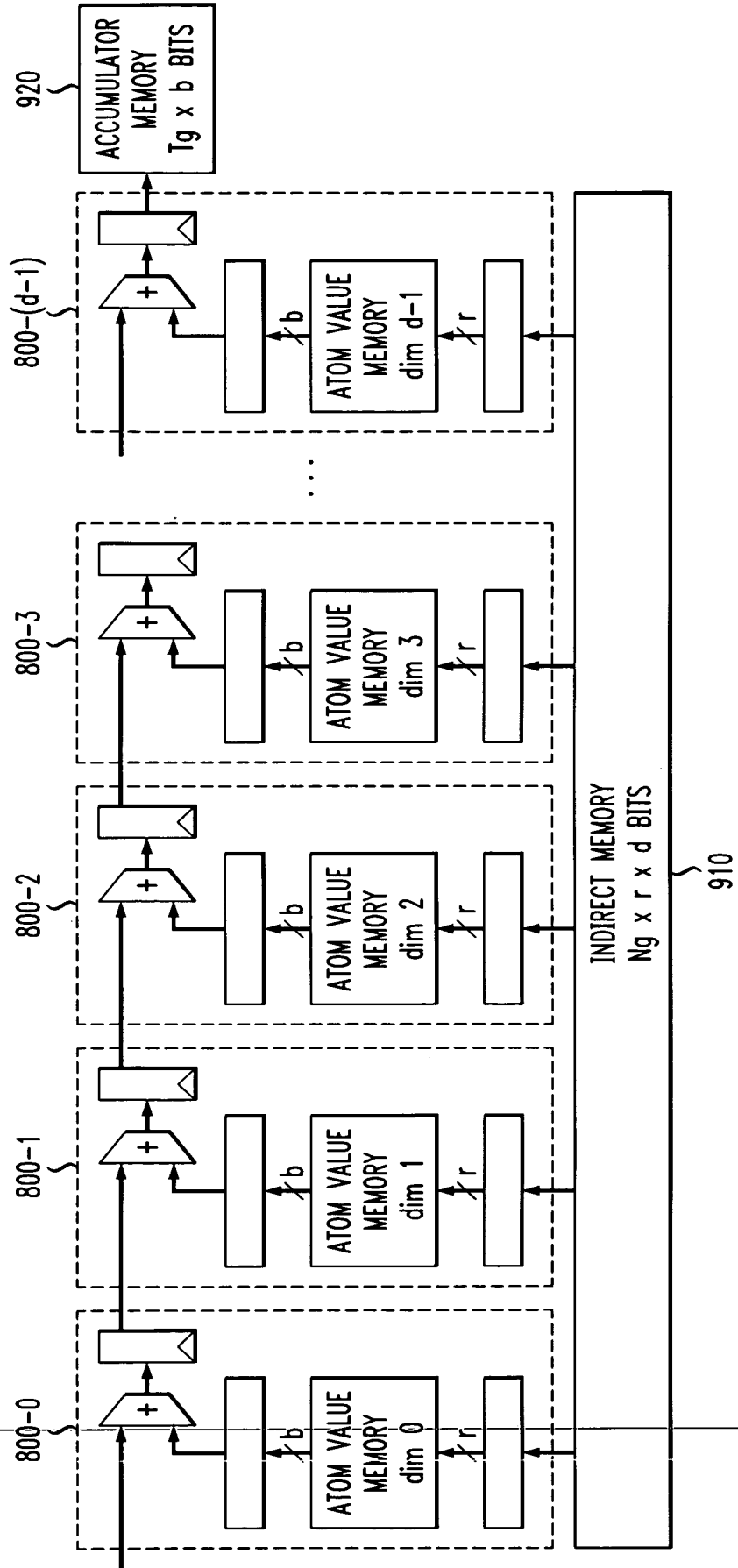


FIG. 10

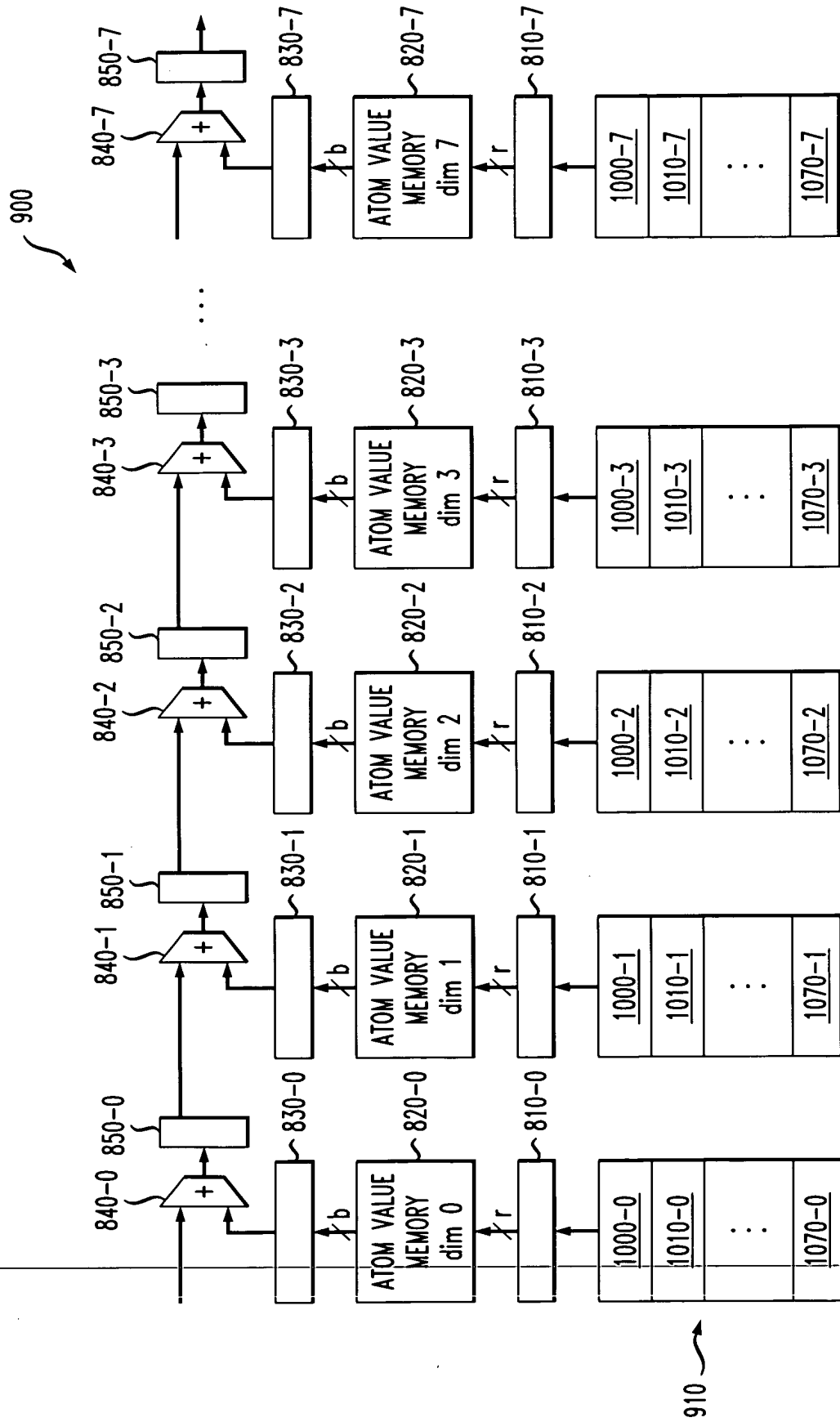


FIG. 11

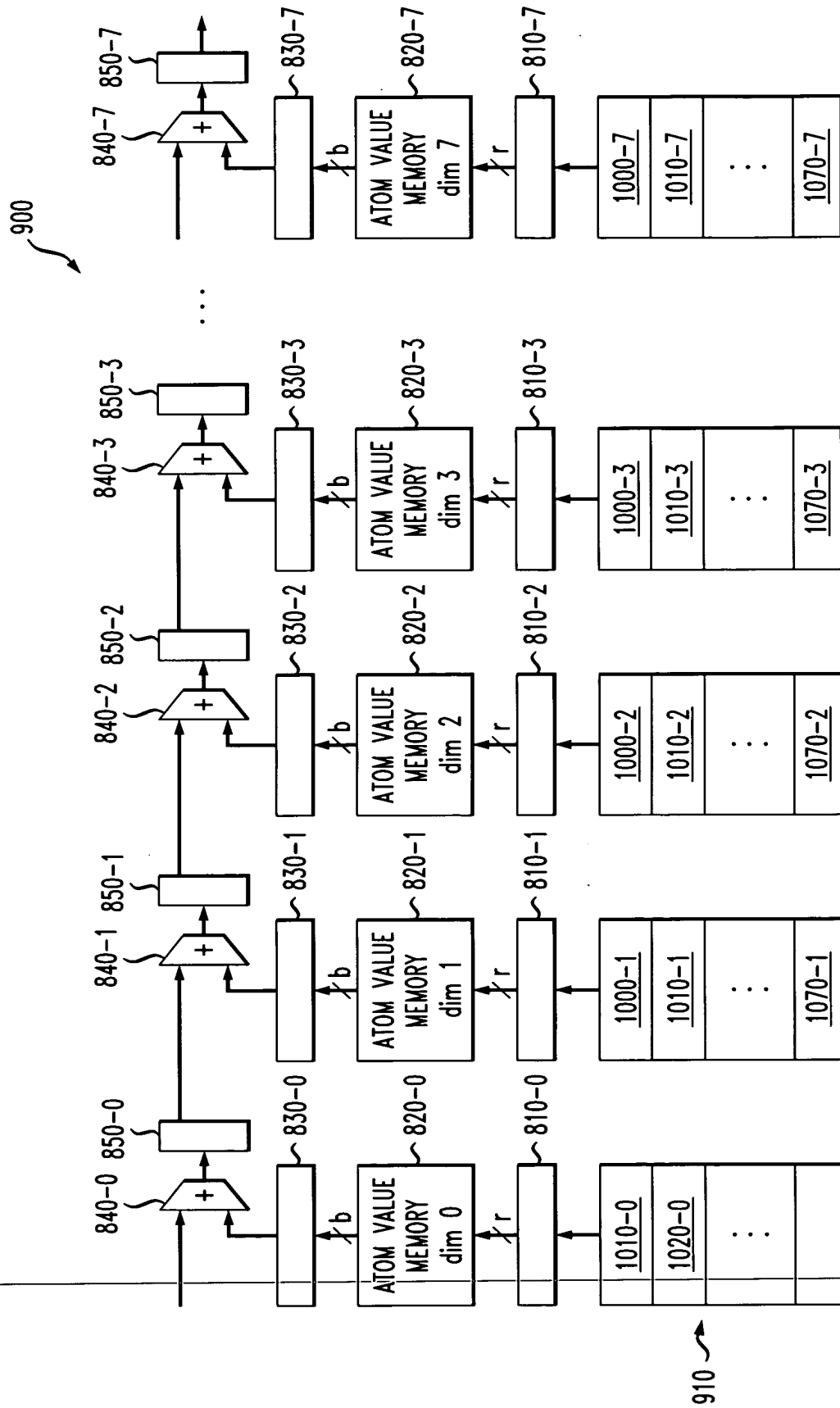


FIG. 12

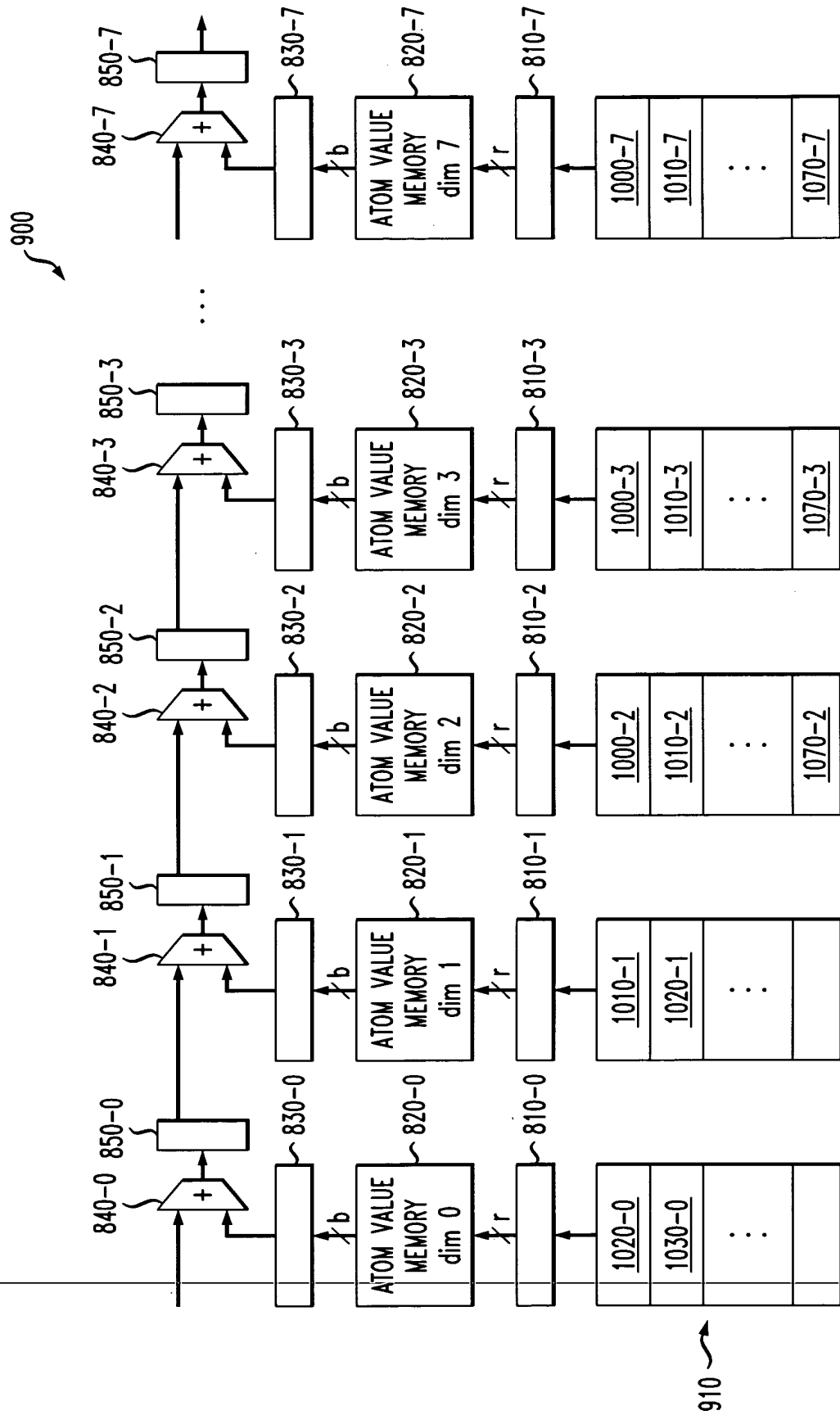
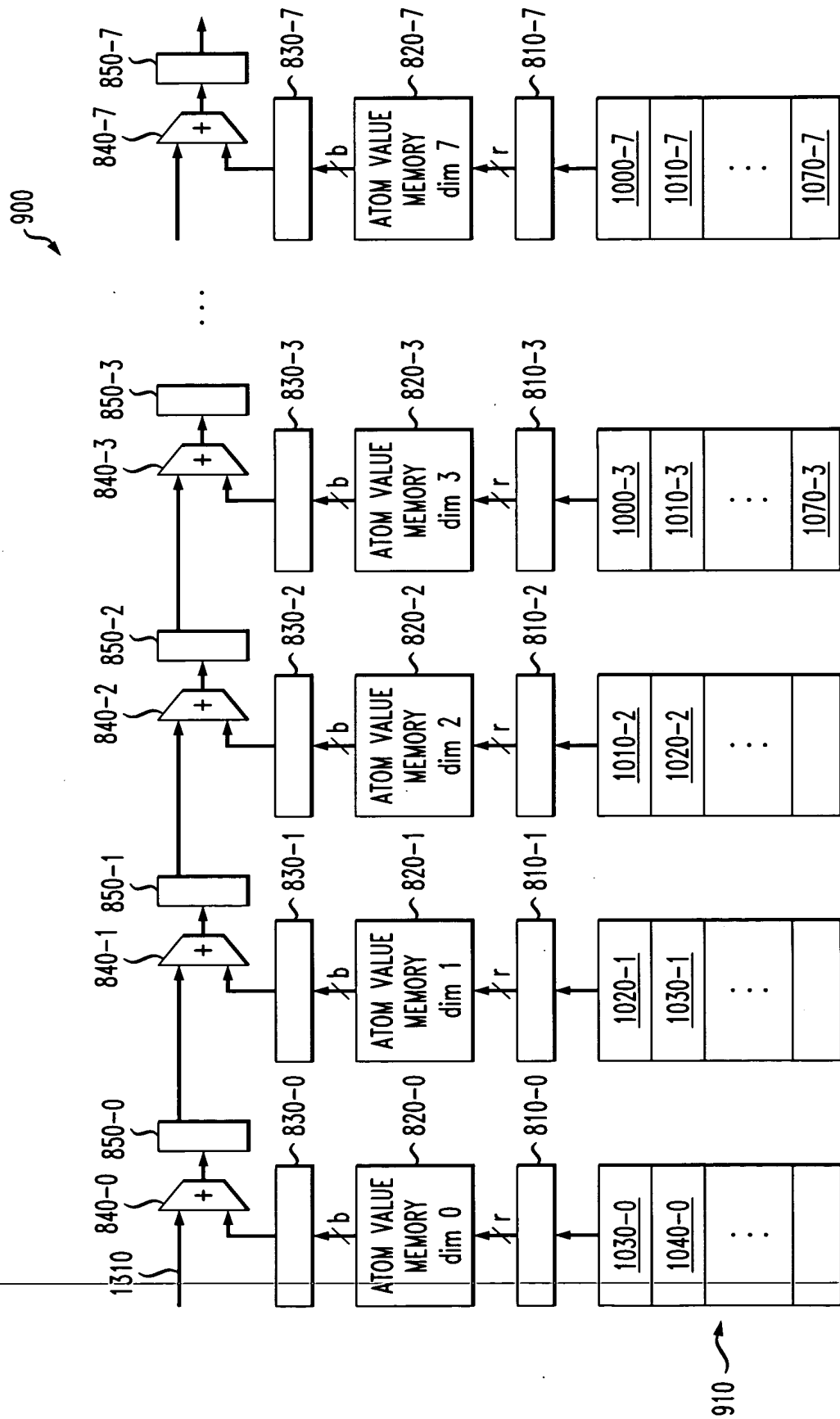


FIG. 13



910

FIG. 14

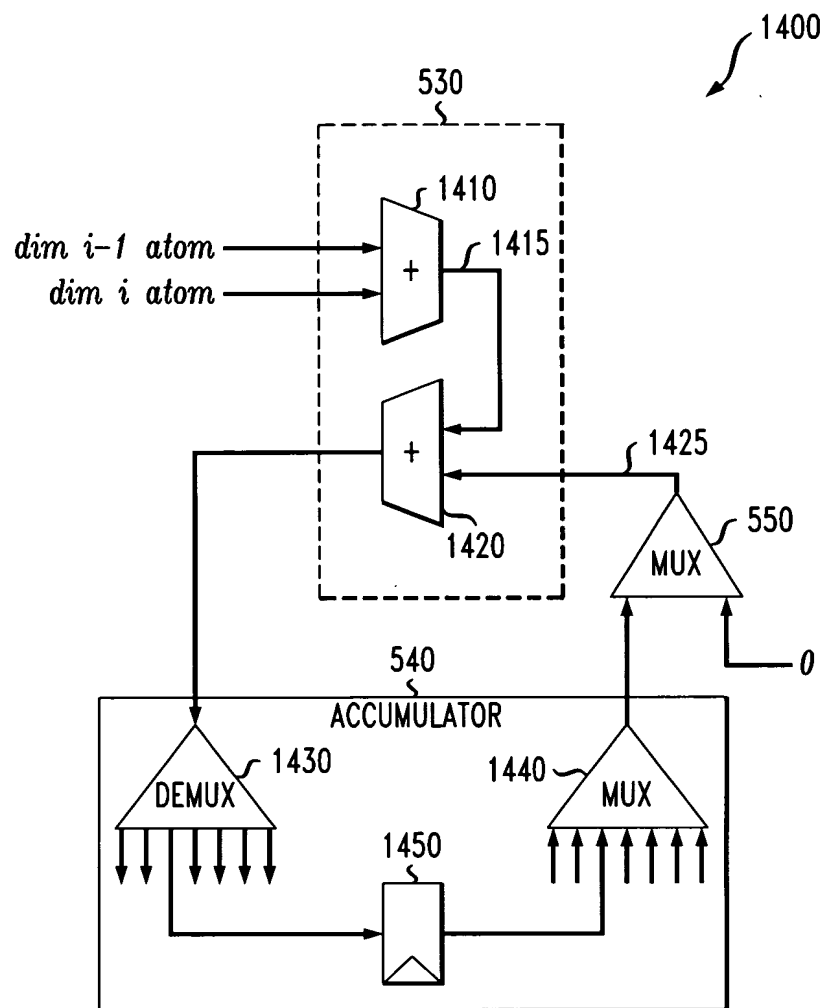


FIG. 15

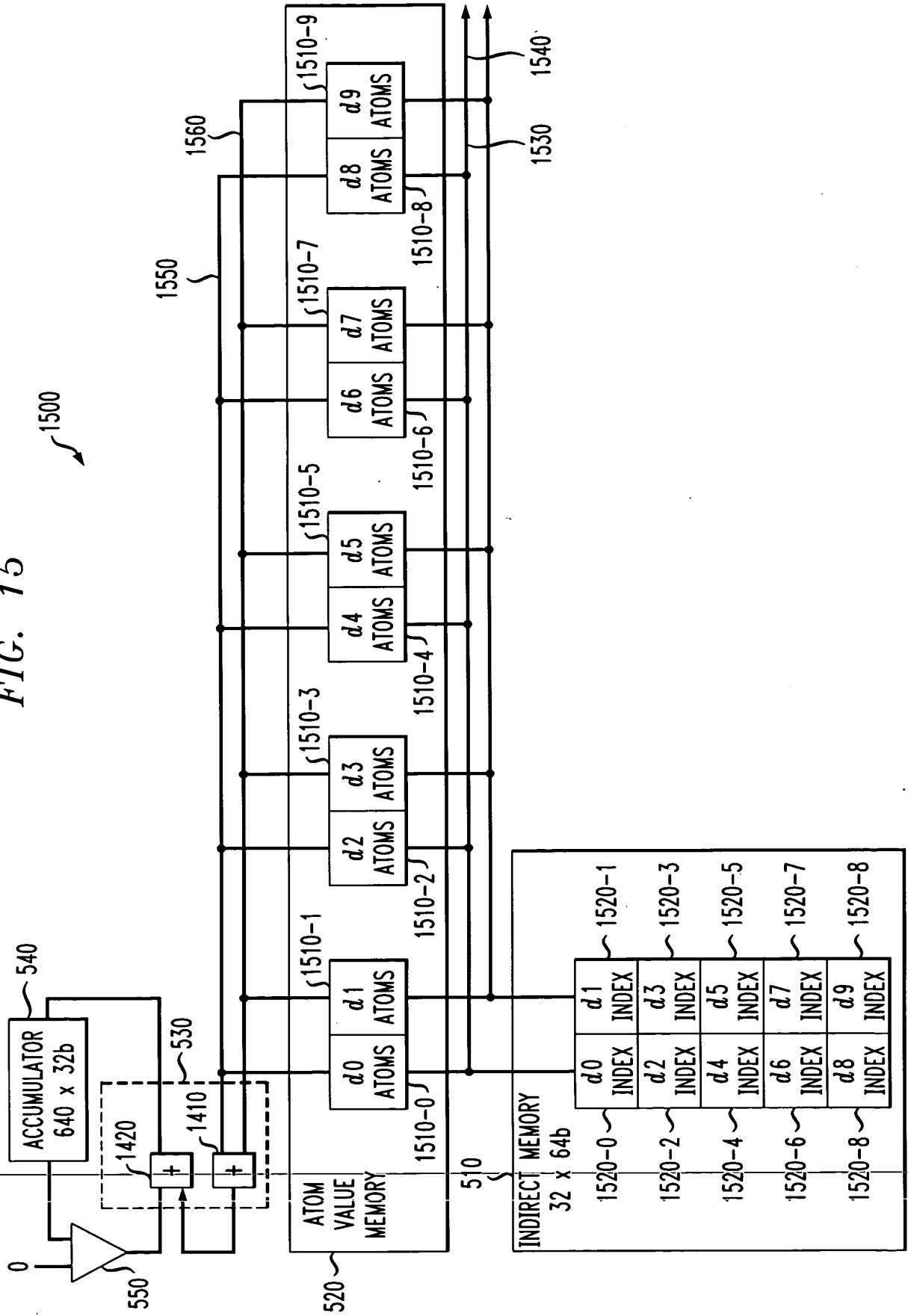


FIG. 16

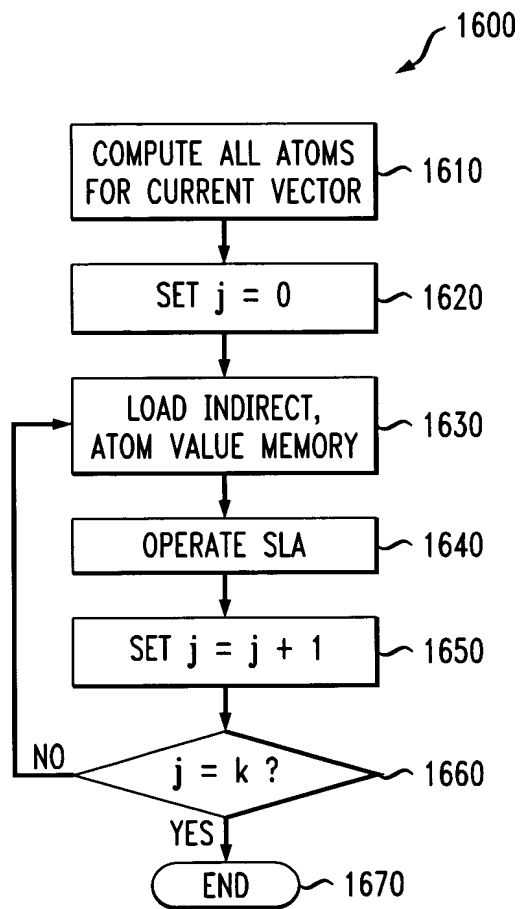




FIG. 17

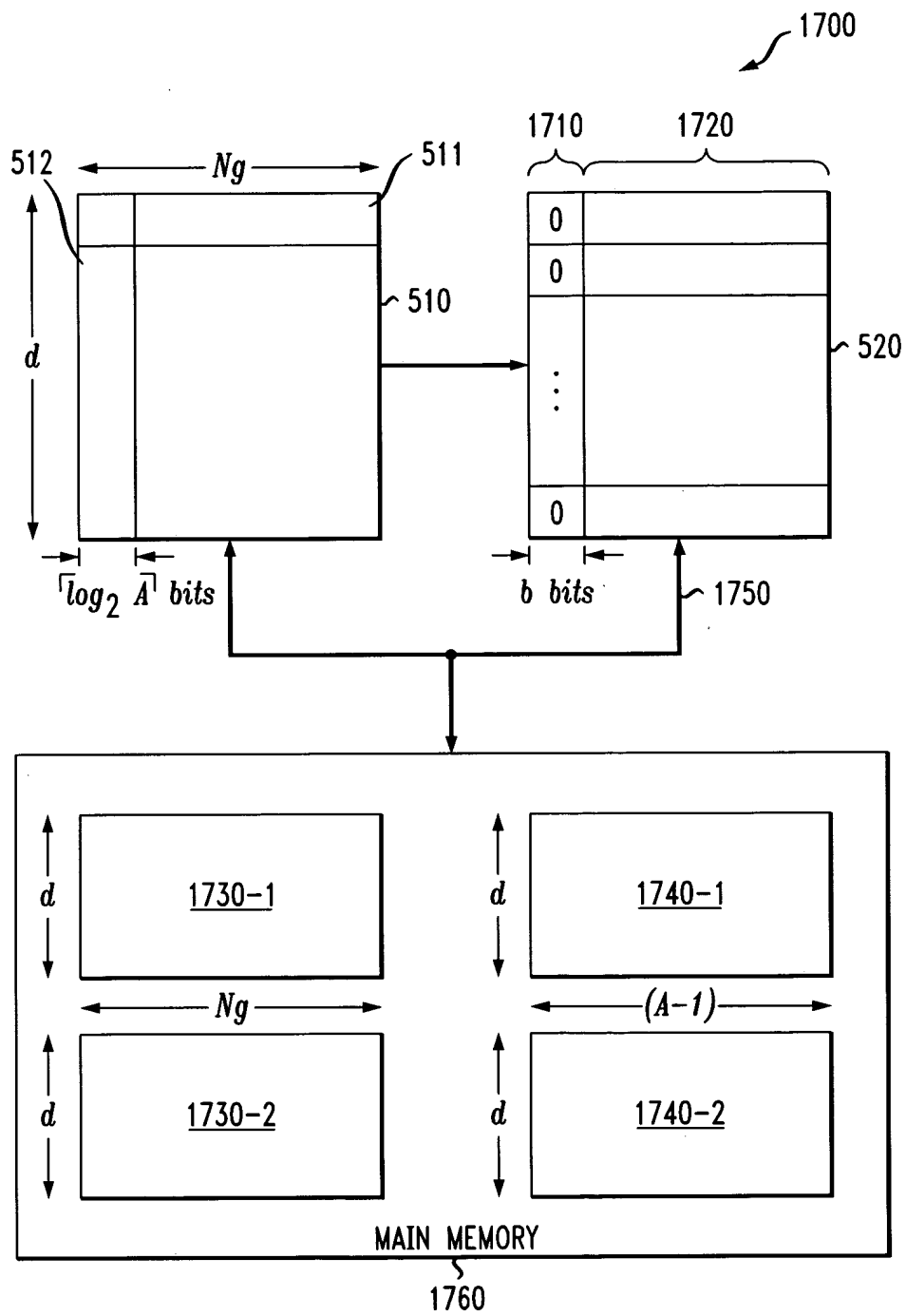


FIG. 18

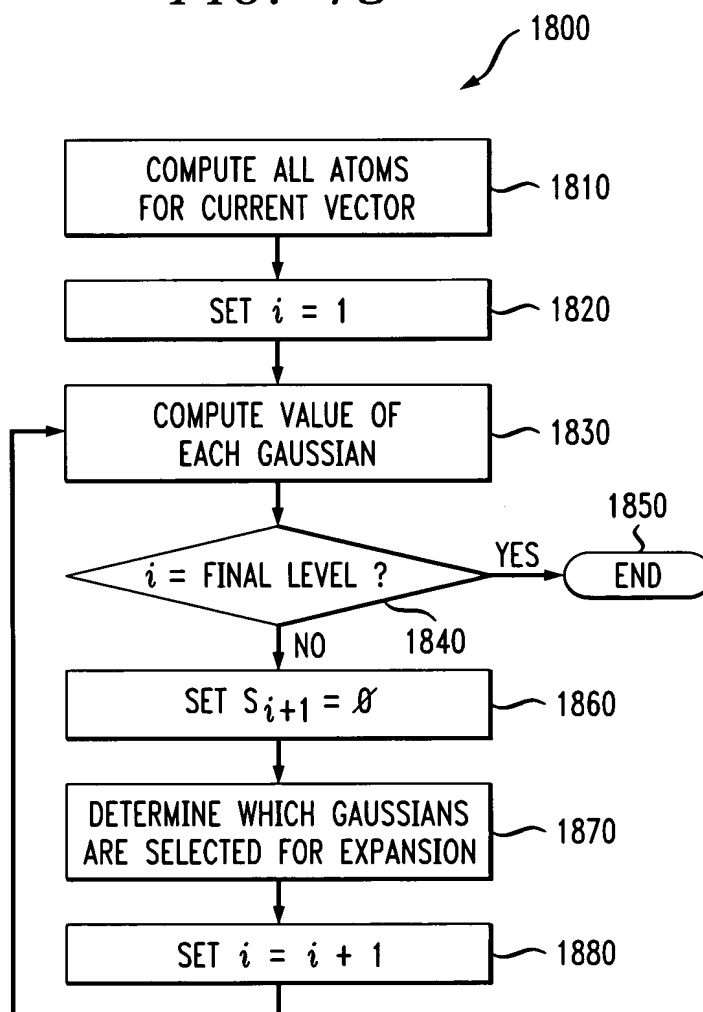
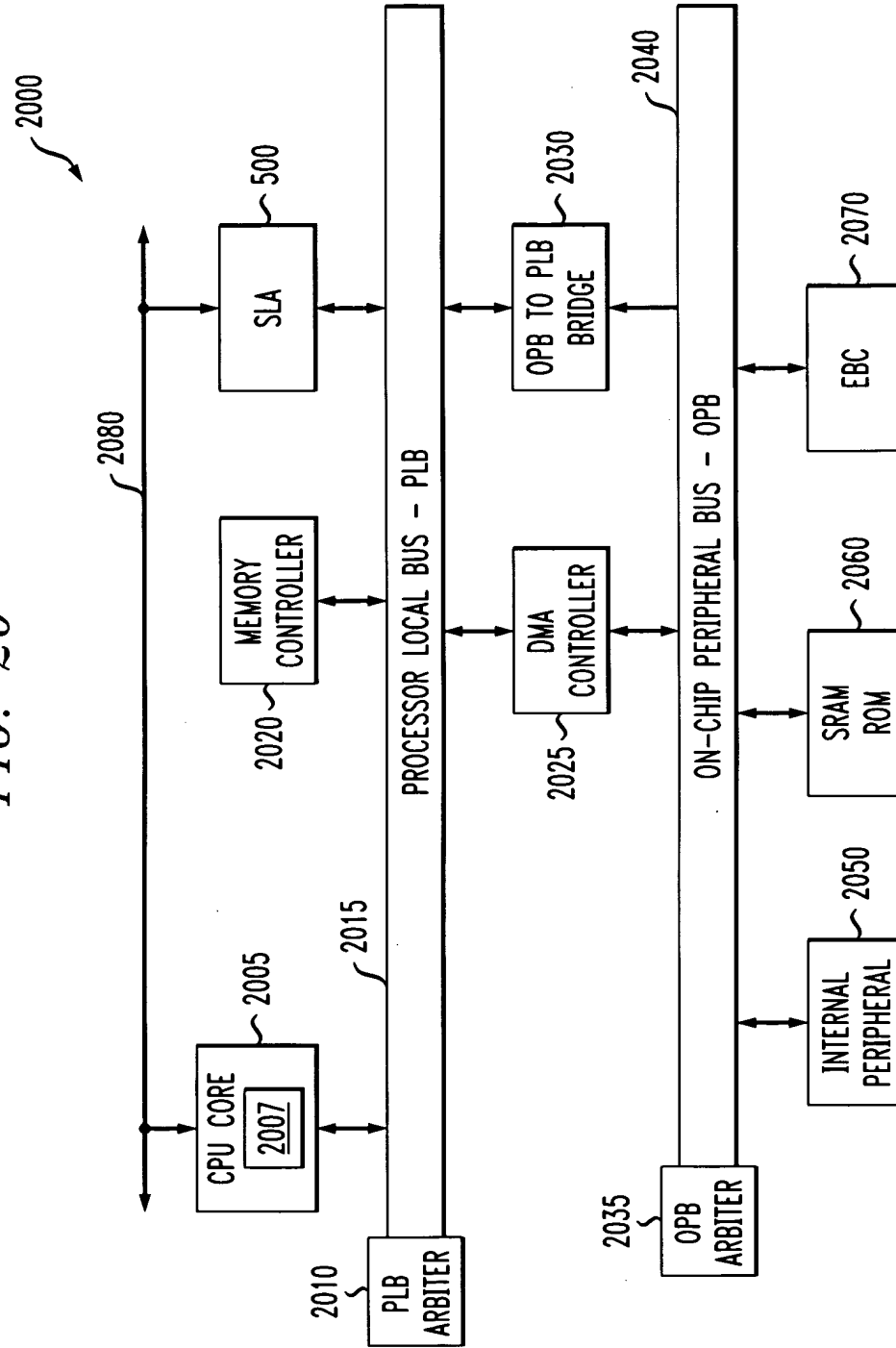




FIG. 20



*FIG. 21*

EXPRESSION	MEANING	TYPICAL
$A$	ATOMS PER DIMENSION	64
$b$	BITS TO REPRESENT AN ATOM VALUE	32
$d$	HARDWARE DIMENSIONS IN MODEL	10
$D = kd$	TRUE DIMENSIONS IN MODEL	40
$H$	LEVELS OF HIERARCHY	3

*FIG. 22*

EXPRESSION	MEANING	TYPICAL
$r = \lceil \log_2 A \rceil$	BITS TO RECORD AN ATOM INDEX	6
$d$	HARDWARE DIMENSIONS IN MODEL	10
$D = kd$	TRUE DIMENSIONS IN MODEL	40
$G$	GAUSSIANS COMPUTED PER FRAME	$1152 = 128 \times (1 + 3 + 5)$

*FIG. 23*

EXPRESSION	MEANING	TYPICAL
$b$	BITS TO REPRESENT AN ATOM VALUE	32
$G$	GAUSSIANS COMPUTED PER FRAME	$1152 = 128 \times (1 + 3 + 5)$

FIG. 24

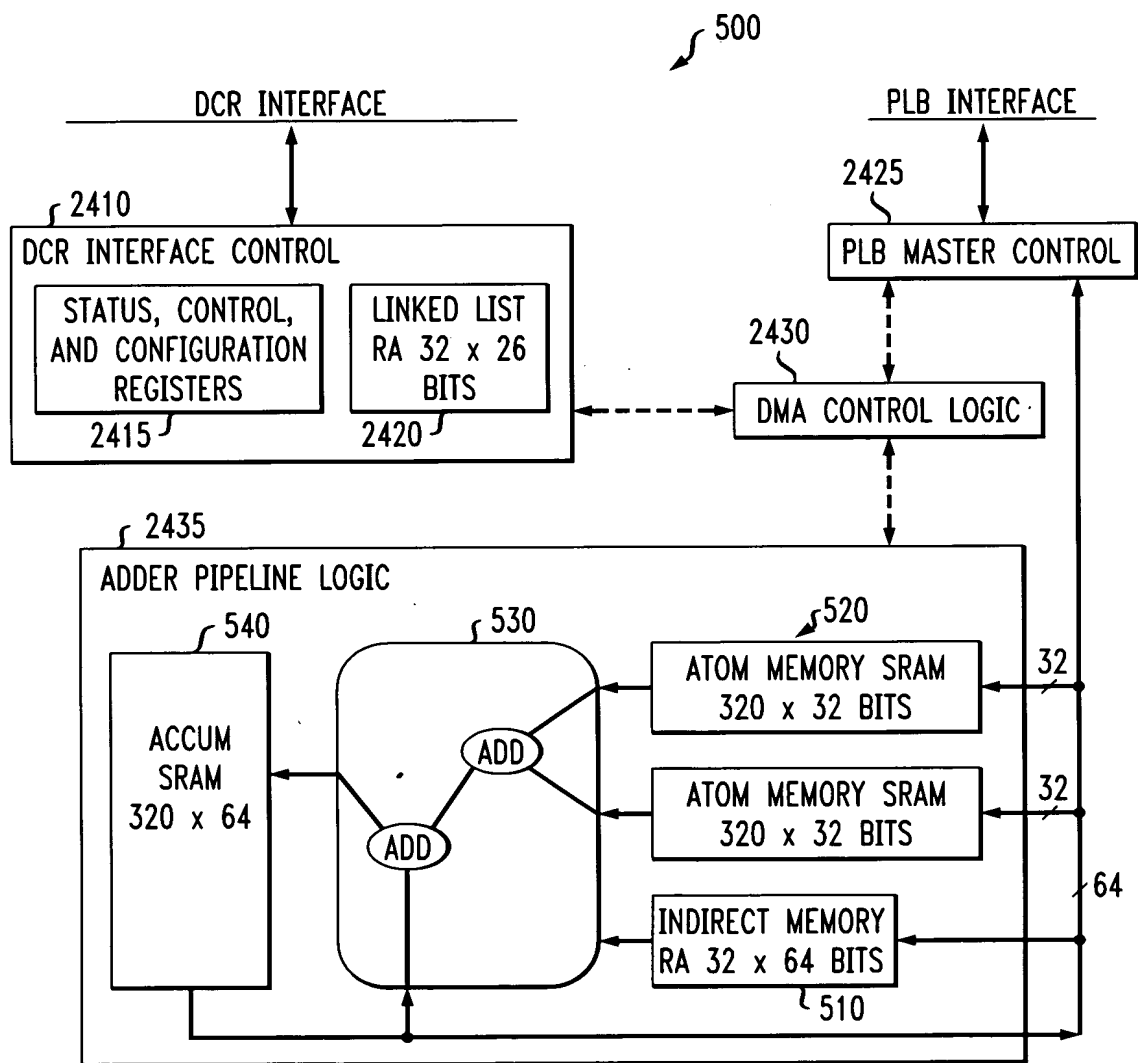


FIG. 25

